COMMENTS ON 881 HILLSIDE-OVERSIGHT DOCUMENTATION
MAY 24, 1990

COMMENTS ON AIR-MONITORING

The RFP has performed alpha surveys of the Hi-Vol air samplers daily from 2/13/90 to 3/30/90. The results are recorded on "Background Study" sheets submitted with other documentation to CDH on May 16, 1990. During the technical review portion of our 5-21-90 meeting, an Air Programs representative asserted that this alpha monitoring produces meaningless data which cannot be correlated to real time alpha concentrations in air. EG&G stated that only the radiological analysis performed and reported monthly could provide a quantitative measurement, and that no real time alpha measuring devices or method is available. When asked why the alpha monitoring was performed, EG&G staff stated that it was to satisfy the public.

Please clarify how RFP intends to use this data to determine if the alpha concentrations in air exceed 0.03 pCi/m^3. This is one shutdown criteria for OPERATIONS RFP committed to in the Responsiveness Summary for 881 Hillside (the other being a 15 mph wind). However, if the daily alpha monitoring does not produce useable data, then this committment cannot be fulfilled.

(2) As presented, the data recorded on the "Background Study" sheets appears to indicate elevated alpha levels compared to background (<250 c/m) for every day the measurements took place. RFP staff must explain how background is defined for this monitoring activity, and procedures used to compare background and actual survey meter readings.

Furthermore, the Responsiveness Summary refers to "operations"while the 881 Hillside Work Procedures, Construction and Drilling, refers to "earth-moving." "Operations" encompasses a much broader range of activities than "earth-moving", (3) and we suggest that any operation which may cause resuspension should be subject to the shutdown criteria of 15 mph or 0.03 pCi/m^3, for example traffic at the site.

Secondly, the "Quality Assurance Project Plan" for the IRA at 881 also refers to "real time" monitoring for radioactivity on page 5-4, as part of Health and Safety Plan procedures. RFP should clarify whether or not "real time" monitoring is possible. (4)

ADMIN RECORD

881 HILLSIDE WORK PROCEDURES
CONSTRUCTION AND DRILLING

A map showing the construction and drilling sites is necessary or must be referenced.

1) Baseline physicals for key personnel must include full body counts.

2) Specify criteria for soil wetness that determines shutdown of operations.

Drilling Work Procedures

1) Same comment at as comment 1 above.

Required Equipment

1) Must include an HNu and radiation monitoring instrument to determine if health hazard is present.

2) Must also list steps for screening of volatiles and radionuclides during drilling operations.

Work Schedules

1) Locations of the drill holes must be shown on a map.

2) Procedure B does not address packer testing.

PROJECT MANAGEMENT PLAN
FOR INTERIM REMEDIAL ACTION
AT THE 881 HILLSIDE PHASE 1-A
OPERABLE UNIT NO. 1

3.1 Project Management

What is the coordination between DOE and EG&G? Environmental Restoration is listed as a support group, but is the managing group.

QUALITY ASSURANCE PROJECT PLAN
for the
INTERIM REMEDIAL ACTION
(Drilling)

Figure 2-1
The location of Rocky Flats Plant is illegible. The RFP falls under regulation of the Colorado Hazardous Waste Act (CHWA) for treatment, storage and corrective action.

Section 2.3
An additional objective of the IM/IRA plan is to be consistent with the final remedy at the site.

Section 3.2.1 Environmental Restoration Department Director.
The last sentence should read ..."reports directly to the "ER" not "ED" Department Director."

Section 3.2.4 H&S Site Representative
The HSC will have stop work authority. Please include a list of other personnel with "stop work" authority.

Section 3.2.5 Air Programs Representative
If "real time" data from air analysis was available, specify how long it would take for the project manager to get this information.

Section 4.3.1 Hydrogeologic Data
The names of the samplers must be recorded.

Section 4.4.3 Completeness
The variable DP_t is one variable with two definitions. One of them needs to be redefined and fixed in the completeness equation.

Section 5.0 Field Operations and Sampling Plans
Figure 5-1 is illegible.

Section 5.2 French Drain Area(Bullet 7)
How much variation is expected in the specific hydraulic conductivity of each individual bedrock sandstone unit? If three orders of magnitude or more is expected, the sampling and determination of hydraulic conductivity procedure needs to be overhauled.

Section 6.0 Sample Chain of Custody and Security
The samples are in the custody of the samplers until released to the drilling contract project manager. Otherwise, the drilling project manager would need to be onsite as samples are collected.

Figure 6-1
The flow chart shows that sample preservation occurs after the samples are collected. The chart contradicts the actual practice observed during CDH inspections.

The possible disposition of samples after rad screening must be shown.

Table 7-9
The table must spcify the holding times for filtered/unfiltered and preserved/unpreserved water samples.

Section 9.2 Validation
A list of all data categories that will be validated must be provided.

Section 9.2.1 Field Data Validation (first paragraph)
The sentence reads,"After data reduction into tables or arrays, the Field QC Coordinator will review data sets for anomalous values. Any inconsistencies will be resolved by seeking clarification from the field personnel responsible for data collection." The Field QC Coordinator may not "resolve" anomalous data, if "resolution" alters the numbers in any manner. The field personnel responsible for sample and data collection should be noting, in ink in the log book, any unusual circumstances that occur at the time data is collected. All unusual circumstances should be noted with the appropriate data point until all the data for a sample has been collected and only then under statistically appropriate scrutiny should "anomalous" data be "resolved."

Section 9.3 Reporting
Specify whether turnaround time is working days or calendar days.
Turnaround time for data validation must be specified.

Section 10.1.1 Field Duplicate
Duplicate samples are not to be split in order to minimize disturbance and possible volatilization of contaminants. A second sample must be taken instead.

Section 10.1.3 Trip Blanks
A trip blank for all parameters in addition to radionuclides is necessary.

Section 15.0 Quality Assurance Records and Document Control
Audit reports must also be retained in the QA file.

Section 13.3 Laboratory Audits
List the criteria used to separate analytical data into the three categories of V,A, and R.

Section 16.0 Quality Assurance Reports
Audit reports must also be maintained to support the project manager in documenting QA activities.

Appendix I Data Validation Reporting Forms
What is the source or reference of these forms? If EG&G has any latitude in the design and use of these forms, it may be appropriate to allow the lab to design a form specific to each type of test, with the data validation information extracted somewhere on the form. It is not clear whether the blank spaces are to contain numbers or just be checked off. It is also not clear whether or not each data point has one of these forms associated with it.